



TB—0388

AUTOMATIC TASKS TERMINATION IN CICS

Issue Date: October 30, 2006
Effective Date: November 12, 2006
Section/Group: Systems/CICS
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The CICS group is taking a proactive approach to deal with runaway (possibly looping) CICS programs/transactions. When such transactions are allowed to run, they have a very negative impact on other tasks currently executing. This impact may manifest itself as a slow response in CICS, the inability to logon to CICS or TSO, batch jobs waiting for execution, etc. The reason for this is that a runaway CICS program seizes a lot of CPU time for itself, thus leaving very little to other applications. Besides the performance implications, there is also a monetary cost involved. Agencies pay extra dollars for CPU time that accrued because a CICS program was allowed to run uncontrollably.

The purpose of this bulletin is to provide notification to agencies that long running CICS transactions will automatically be terminated by a Resource Limiting feature of OMEGAMON/CICS. It will be assumed that such transactions are runaway or looping tasks, therefore subject to immediate cancellation. CICS programs or transactions which legitimately need to run for a long time will be excluded from automatic purge. There are very few such transactions and they will be listed later in this bulletin. The criterion used to determine if a given CICS transaction is to be canceled will be based upon the total CPU time usage for that transaction. The present threshold is set to two seconds of CPU time. This means that, unless excluded, CICS tasks will be unconditionally terminated if they use more than two seconds of CPU time.

It is possible to have different thresholds for different transactions. Right now, however, all transactions are grouped into two categories: those that can exceed two seconds of CPU, and those that cannot. Again, only a small number of transactions will be allowed to use more than two seconds of CPU time.

If a CICS transaction is terminated by Resource Limiting it will abend with RLCP code. You will probably see a message "TRANSACTION xxxx FAILED WITH ABEND RLCP" at the bottom of the screen.

The CICS Group, together with Operations staff, has developed a procedure for identifying long running transactions. When a CICS program is terminated due to

excessive CPU utilization, an e-mail message will be sent to the CICS administrator identifying the transaction name, date/time, and the user. The CICS administrator will in turn attempt to contact somebody at the agency who is the owner of the offending program.

Presently, only the following transactions are excluded from being purged:

- HLP7
- U811
- U861
- NS** (Natural transactions)

If you think that a transaction should not be a candidate for automatic purge, or that it should have greater than the two second CPU limit, please contact the CICS Group at (801) 538-3179.